

**REMARKS**

Claims 1-20 are all the claims pending in the application.

The Examiner has rejected claims 1-4, 7-10, 11-14 and 17-20 under 35 U.S.C. § 103(a) as being unpatentable over Baxter et al. and Kolchinsky. Applicant traverses these rejections because the cited references fail to disclose or suggest all of the claim limitations. Specifically, the references fail to disclose or suggest at least the following limitations of independent claims 1 and 11:

wherein all operations necessary to perform said digital image processing and said digital control processing are performed in said field programmable gate array.

Applicant first notes that the Examiner concedes that Baxter et al. fails to disclose a field programmable gate array (FPGA) for executing the image and control processing wherein the first and second internal logic descriptions, corresponding to each type of processing, are written to the FPGA. Instead, the Examiner asserts that Baxter et al. discloses using dedicated processors 66 and 70 for executing each type of processing.

In order to make up for this deficiency, the Examiner cites to Kolchinsky. Specifically, the Examiner asserts that Kolchinsky discloses a reconfigurable image processing system (figure 2) that is implemented by case address generator 22 and arithmetic unit 26 (see figure 2), wherein arithmetic unit 26 operates to process image data.

The Examiner argues that claims 1 and 11 require an image processing system provided with an FPGA capable of altering the logic description describing an operating state, but does not preclude the presence of a second FPGA. However, as amended, claims 1 and 11 require that all

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operations necessary to perform said digital image processing and said digital control processing are performed in said field programmable gate array. Thus, Kolchinsky, which requires the use of two FPGAs, fails to disclose or suggest the FPGA limitation that is missing from Baxter.

Regarding claims 2-4, 7-10, 12-14 and 17-20, they should be allowable at least based on their dependence from claims 1 or 11 for at least the same reasons.

Regarding claims 5, 6, 15 and 16, which have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Baxter et al. and Kolchinsky, and further in view of Fukuoka, they should be allowable at least based on their dependence from claims 1 or 11 for at least the same reasons.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

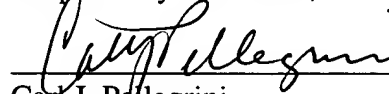
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**23373**

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Respectfully submitted,



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